tion. In the present stage of our examinations it would not be safe to give other than very general directions in this respect.

"Perhaps," adds Mr. Ruffin, "the greatest profit to be derived from marling, though not the most apparant, is on such soils as are full of wasting vegetable matter. Here the effect is mostly preservative, and the benefit may be great, even though the increase of crop may be very inconsiderable. Putrescent manure laid on any acid soil, or the natural vegetable cover of those newly cleared, without marl, would soon be lost, and the crops reduced to one half, or less. But when marl is previously applied, this waste of fertility is prevented; and the estimate of benefit should not only include the actual increase of crop caused by marling, but as much more as the amount of the diminution, which would otherwise have followed. Every intended clearing of woodland, and espicially of that under a second growth, ought to be marled before cutting down—and it will be still better, if it can be done several years before. If the application is delayed until the new land is brought under cultivation, though much putrescent matter will be saved, still more must be wasted. By using marl some years before obtaining a crop from it, as many more growths of leaves will be converted to useful manure, and fixed in the soil—and the increased fertility will more than compensate for the delay. By such an operation, we make a loan to the soil, with a distant time for payment, but an ample security, and at a high rate of compound interest."

The additional information communicated in the following paragraph from the same source may likewise prove interesting to many farmers. "Marling deepens cultivated sandy soils, even lower than the plough may have penetrated. This was an unexpected result, and when first observed, seemed scarcely credible. But this effect also is a consequence of the power of calcareous earth to fix manures. After the soil is marled calcareous as well as putrescent matter is carried down by the rains as far as the soil is open enough for them to pass. This will always be as deep as the plouging has been, and in loose earth, somewhat deeper—and the chemical union formed between these different sub-